# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of	)	
Revitalization of the AM Radio Service	)	
First Report And Order, Further Notice of Proposed Rule Making and Notice of Inquiry	)	MB Docket No. 13-249

To: The Commission

#### COMMENTS OF MT. WILSON FM BROADCASTERS, INC.

Mt. Wilson FM Broadcasters, Inc. ("Mt. Wilson"), pursuant to the FCC Rule Section 1.401, submits its Comments to the above captioned Notice of Proposed Rule Making ("NPRM") wherein the FCC seeks to investigate possible changes to its rules which would allow AM broadcasters to better serve the public.

#### Introduction

Mt. Wilson is the licensee of Class B AM stations KMZT, Beverly Hills and KIDD, Monterey and Class C AM station KNRY Monterey, all California. Mt. Wilson has observed a erosion of AM listenership through the years which is believed attributable to both decreasing AM signal quality caused by ever increasing levels of electrical interference and the disparity between the size of most AM station daytime and nighttime coverage areas. Increased competition from unlicensed program services employing Wi-Fi and internet delivered radio, which have the same signal quality and range day and night, make the future of AM radio questionable despite owners like Mt. Wilson who have a heavy focus on delivering unique program content to the public and meeting the needs of the local community.

Mt. Wilson believes that a number of the proposals found in the current NPRM show great potential benefit for AM stations as they would provide stronger day and night signals which are needed to override the rising interference levels described above. Mt. Wilson offers the following comments in

support of specific proposals in the NPRM. Paragraph numbers referenced in the following Comments are those found in the Public Notice Released October 23, 2015.

#### **Section A.** Modify AM Protection Standards

At paragraph 49 the FCC introduces modification of the AM protection standards. At paragraph 56 the FCC proposes the following changes to the protection standards for Class A stations:

"We tentatively conclude, therefore, that (1) all Class A stations should be protected, both day and night, to their 0.1 mV/m groundwave contour, from co-channel stations; (2) all Class A stations should continue to be protected to the 0.5 mV/m groundwave contour, both day and night, from first adjacent channel stations; and (3) the critical hours protection of Class A stations should be eliminated completely."

Mt. Wilson believes, as stated by many other commenters in this proceeding, that the existing level of interference in the AM band makes a 0.1 mV/m signal nearly impossible to listen to in most areas and therefore believes that the limit of protected service, both day and night, for Class A stations should be the 0.5 mV/m ground wave contour for co-ch operation and be otherwise consistent with the protection levels set for Class B, C and D stations on adjacent channels as addressed herein. Mt. Wilson concurs with the Commission's recommendation that critical-hours protection for Class A stations should be completely eliminated.

It is Mt. Wilson's belief that there are a plethora of program choices available on FM radio, satellite radio, over Wi-Fi and internet and cellular radio handsets today which are not local and therefore directly complete with the so called "service" offered by Class A AM nighttime skywave signals. These services offer superior fidelity when compared to Class A station skywave service and are more reliable in sharp contrast to the sporadic nature of the regularly fading sky wave service provided by Class A stations today. It is reasonable to believe that if Class A sky wave service were to be deleted that the public interest would be served through the many local stations who could meet the needs of their community but are currently deprived of any local nighttime AM service opportunity because of Class A sky wave protection requirements.

## Section A. 2. Change Nighttime RSS Calculation Methodology

At paragraph 62 the FCC has proposed modified nighttime protection standards which are believed much more in keeping with the nighttime allocation rules employed by our neighbors in Canada and Mexico:

"We therefore tentatively conclude that we should roll back the 1991 rule changes as they pertain to calculation of nighttime RSS values of interfering field strengths and nighttime interference free service. We propose to amend Section 78.182(k) of the Rules to return to predicting the nighttime interference-free coverage area using only the interference contributions from co-channel stations and the 50 percent exclusion method."

Mt. Wilson wholeheartedly supports the removal of adjacent channel protection requirements in the calculation of nighttime interference and protection of station night service based on the 50% RSS. The Commission itself gives the most powerful reason possible for making this change when it states "... the rules have impeded facility improvements that are more necessary now than 24 years ago, because the noise floor has increased as much as or more than station-to-station interference, and increasing signal strength to a station's primary service area has become more of a priority than maintenance of rules that offer a small return on interference reduction, compared to the burden they impose on signal improvement."

## Section A. 3. Change Daytime Protection to Class B, C and D Stations

At paragraphs 63 - 65 the FCC proposes to maintain the current 26 dB D/U daytime co-ch protection ratio and return to the 0 dB D/U 1<sup>st</sup> and 2<sup>nd</sup> adjacent channel protection ratio in place prior to 1991 and remove 3<sup>rd</sup> adjacent channel protection requirements. The daytime contour to be protected would be the 2 mV/m contour for co and first adjacent channel stations and the 25 mV/m contour for 2<sup>nd</sup> adjacent channel stations.

Mt. Wilson heartily supports these changes with one exception, it does believe that Class A stations should be protected as is proposed for Class B, C and D stations on 1<sup>st</sup> adjacent and 2<sup>nd</sup> adjacent channels but protected to the 0.5 mV/m contour by other co-channel stations.

#### Summary of Daytime Proposed Allocation Changes to be found in 73.37(a)

FCC Rule Section 73.37(a) as recommended is found below.

Revise paragraph (a) of Section 73.37 to read as follows:

## § 73.37 Applications for broadcast facilities, showing required.

(a) \* \* \*

Frequency	Contour of proposed station	Contour of any		
Separation	(classes B, C and D)	other station		
(kHz)	(mV/m)	(mV/m)		
0	0.025	0.500 (Class A)		
	0.100	2.0 (Other classes)		
	2.0	0.100 (Other classes)		
10	2.0	2.0 (Class A)		
	2.0	2.0 (Other classes)		
20	25.0	25.0 (All classes)		

## Daytime and Night Proposed Allocation Changes as Found in 73.182(o)

The above changes can be summarized by reference to Rule Section 73.182(o) which should look like this:

Class of station	Class of channel used	Signal strength contour of area protected from objectionable interference (µV/m)		Permissible interfering signal (μV/m)	
		Day - GW	Night - GW	Day-GW	Night
A	Clear	SC 500	SC 500	SC 25	SC 25 SW
		AC 2000	AC 2000	AC 2000	AC 2000 GW
В	Regional	2000	2500 or NIF if >	SC 100	20:1 10%SW
				AC 2000	Not presc.
С	Local	2000	Not presc.	SC 100	Not presc.
	Regional	2000	Not presc.	SC 100	Not presc.
D	10000000			AC 2000	Not presc.

## Section B. Revise Rule on Siting of FM Cross-Service Fill-In Translators

Mt. Wilson also supports the Commission's position as found in paragraph 68 with respect to keeping the fill-in cross-service translator service area within the core market area of the AM station while also recognizing that the current rule prevents FM translator service from reaching the area currently served by the AM 2 mV/m contour. The FCC's proposal to Extend the translator 60 dBu contour radius to 64 kilometers is a step in the right direction but it does not fully account for the high conductivity found predominantly in the middle of the country and the needs of those stations.

For example, a 15 conductivity stretches through much of the central U.S. from the Mexican border to the Canadian border. An AM power level of 5 kW with a standard 90 degree quarter wave tower, produces the following distance to 2 mV/m contour:

540 kHz 146 kM

1000 kHz 84

1600 kHz 52

An FM translator's 60 dBu coverage contour, even under the best circumstances, assuming a maximum powered translator (250 watts) with an antenna center 2,000 feet HAAT (610 meters), would extend out 33 kilometers. However, the translator may enjoy a listenable signal out to the 34 dBu contour which could extend out 92 kilometers from the translator transmitter site. Thus, even if the proposed rule modification were expanded to a 40 mile radius, as suggested, changing the rule to recognize the even greater practical extent of service that an FM translator can provide, and that is needed in many areas of the country, would provide greater flexibility to AM operators to locate their FM translators in locations which they determine would best serve their "core" audience. It is believed that allowing the translator 60 dBu to extend out a maximum of 60 miles, 96 kilometers from the AM transmitter site, as long as it remains in the 2 mV/m contour is an optimum, and more valuable, change to 74.1201(g). This change would be reflected in 74.1201(g) as follows:

## Rule Section 74.1201(g) Proposed language

(g) \* \* \* The coverage contour of an FM translator rebroadcasting an AM radio broadcast station as its primary station must be contained within the greater of either the 2 mV/m daytime contour of the AM station or a 40 mile (64 km) radius centered at the AM transmitter site, but the translator's 1 mV/m coverage contour may not extend beyond a 60-mile (96 km) radius centered at the AM transmitter site. The protected contour for an FM translator station is its predicted 1 mV/m contour.

#### **Section C.** Modify Partial Proof of Performance Rules

At paragraph 70 the Commission proposes to modify section 73.154(a) to reduce the number of required radials to be measured believing that this change will not result in AM directional antenna systems being out of adjustment as a result of this change. Mt. Wilson agrees with the Commission's conclusion that reducing the number of radials would not result in interference or improper adjustment of directional antenna systems and therefore agrees with the proposed change.

#### Section D. Modify Rules for Method of Moments Proofs

At paragraph 72 the Commission lists seven changes to the MoM Proof Rules which are based on years of processing MoM license applications and commenter's input. At paragraph 73 the FCC proposes to implement the seven procedural and rule change realaxations with the exception of the elimination of reference field strength measurements. Mt. Wilson believes that unnecessary cost and time is associated with some of the recertification procedures but also sees that has time has passed and confidence in MoM licensing has increased that these beneficial changes can in fact be made without detriment to the licensee or to other stations. With regard to Section 73.151(c)(3), it is agreed that maintaining the requirement for reference field strength measurements, when the initial license application is filed, should be maintained in the rules as a basic external proof of pattern shape. Because physical environments do change over time it is suggested that the recertification portion of the rule be changed to require recertification measurements once every five years instead of the current two year interval.

With regard to modeling of a skirt-fed towers we feel that the use of MoM has progressed to the point that including skirt feeds is appropriate. A specific MoM software should not be specified. As long as the model data is calibrated against measured impedance and the current distribution is shown to be reasonable there should be no reason to question the software used. Further, limiting the software used could prevent new software implementations with potentially greater accuracy from being employed. That outcome would be a disservice to both the FCC and the industry.

## Section V. B. Relaxed Main Studio Requirements

At paragraph 87 the Commission cites the historical need for a main studio as the vehicle by which a station serves the needs and interests of those residing in the station's community of license. Arguably stations which serve the needs of its community and surrounding area have loyal listenership and enjoy the support of the community. If serving the community is the goal then the question should be how does a station best serve its community and listeners in the 21<sup>st</sup> century and not "what are the main studio requirements." When looked at in this way it may turn out that a "main studio" presence or a "local management presence" are not associated with successful service to the community of license and surrounding service area.

#### Conclusion

Mt. Wilson FM Broadcasters, Inc. is proud to have both led and participated in many developments in the broadcast industry including implementation of HD radio on AM. It believes that there is a bright future for AM Radio and that future can be seen by implementing improved technologies such as full digital transmissions. We thank the FCC for continuing a proceeding that will surely help AM broadcasters to better serve the public.

Respectfully submitted,

MT. WILSON FM BROADCASTERS, INC.

By: /SS/
Saul Levine, President
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